

CLAIMS

1. A stator structure for a resolver comprising:

a stator core, wherein the stator core includes protrusions that extend outwardly from a center of the stator core, and the protrusions are shaped such that a keyway is formed between the protrusions;

a connector module, wherein the connector module includes pins for conducting electricity to the resolver, wherein the connector module includes a key part, the shape of which conforms to the shape of the keyway, and the key part is fitted into the keyway for attaching the connector module to the stator core.

2. The resolver stator structure of claim 1, wherein the resolver includes:

a first insulating member, which is located on a first side of the stator core; and

a second insulating member, which is located on a second side of the stator core, and the first side of the stator core is opposite to the second side of the stator core, wherein the first and second insulating members surround the stator core.

3. The resolver stator structure of claim 1, wherein the connector module is mated with a socket to electrically connect a lead line to the resolver.

4. The resolver stator structure of claim 1, wherein the connector module includes a fastener for fastening the connector module to one of the insulating members.

5. The resolver stator structure of claim 1, wherein the connector module includes a fastener for fastening the connector module to one of the insulating members, wherein the fastener, when fastened, prevents the connector module from moving within the keyway.

6. The resolver stator structure of claim 1, wherein distal ends of the protrusions are angled toward one another to form the keyway.

7. The resolver stator structure of claim 1, wherein the connector module includes a stop member that abuts against the protrusions when the connector module is attached to the stator core, wherein the stop member prevents movement of the key part within the keyway.

8. The resolver stator structure of claim 1, wherein the stator core includes a plurality of plates that are stacked, and more than one of the plates includes protruding members that form the protrusions.

9. The resolver stator structure of claim 1, wherein the resolver core is generally circular and has a central axis, and the connector module has a longitudinal axis that is perpendicular the central axis of the stator core.

10. A stator structure for a resolver comprising:

a stator core, wherein the stator core includes protrusions that extend away from a center of the stator core, and the protrusions are shaped such that a keyway is formed between the protrusions;

a first insulating member, which is located on a first side of the stator core; and

a second insulating member, which is located on a second side of the stator core, and the first side of the stator core is opposite to the second side of the stator core, wherein the first and second insulating members surround the stator core;

a connector module, wherein:

the connector module is separate from the first and second insulating members;

the connector module includes pins for conducting electricity to the resolver; and

the connector module includes a key part, the shape of which conforms to the shape of the keyway, and the key part is fitted into the keyway for attaching the connector module to the stator core.

11. The resolver stator structure of claim 10, wherein a projection is formed on the key part and a hole is formed in the first insulating member, and the projection fits into the hole and is fused to the first insulating member when the connector module is fitted to the stator core.

12. The resolver stator structure of claim 10, wherein the connector module is mated with a socket to electrically connect a lead line to the resolver.

13. The resolver stator structure of claim 10, wherein distal ends of the protrusions are angled toward one another to form the keyway.

14. The resolver stator structure of claim 10, wherein the connector module includes a stop member that abuts against the protrusions when the connector module is attached to the stator core, wherein the stop member prevents movement of the key part within the keyway.

15. The resolver stator structure of claim 10, wherein the stator core includes a plurality of plates that are stacked, and more than one of the plates includes protruding members that form the protrusions.

16. The resolver stator structure of claim 10, wherein the resolver core is generally circular and has a central axis, and the connector module has a longitudinal axis that is perpendicular the central axis of the stator core.